

CHAPTER 5

RECOMMENDED ACTION AND LIST OF COMMITMENTS

This chapter describes the process by which a recommended Proposed Action was selected. Two alternatives were evaluated for the routing of the relocated pipelines.

5.1 RECOMMENDED ROUTE

The comparison of these two routes is discussed below. Although it is longer than the southern route, the northern route would have fewer engineering and environmental impacts, and it is Reclamation's preferred route. Table 5-1 summarizes the environmental factors considered in assessing the northern route and the southern route alternatives.

The northern route is superior from a construction standpoint based on considerations of access and hazardous geologic conditions. Access to the preferred route is much better than access to the southern route. Also, the hazardous geologic conditions along the steep side slopes of Basin Mountain and the difficulties associated with preparation of a construction work area in this location are major factors of concern with construction along the southern route. The northern route is a less complicated construction problem because no significant geologic hazards are apparent along this alignment.

The potential for significant environmental impacts from pipeline construction within the southern route appear greater than those from the northern route. Specific environmental concerns associated with the southern route include potential landslides, impact to elk calving grounds, erosion potential, and visual impacts. In contrast, the only identified major environmental concern associated with the northern route is the potential for impacts to cultural resource sites. Impacts to cultural resources would either be avoided as the pipelines are routed, or would be mitigated for under commitments made in the FSEIS

5.1.1 Northern Route

Other surface alignments and permutations of surface alignments with HDD may be technically feasible. However, within the constraints regarding pipeline location in relation to the Ridges Basin area that have been placed on the northern route, other viable options would not have more favorable construction conditions or shorter HDDs.

No specific geologic hazards of major concern were observed along the northern route. Since much of this route alignment is located within drainage basins that flow away from the Ridges Basin Reservoir, exposure to the reservoir is minimal in comparison to the southern route. Based on the discussion topics covered for the northern route geotechnical assessment, the northern route is recommended to be a more favorable alignment for relocation of the pipelines.

The northern route is the preferred route alignment from an environmental standpoint based on the following:

- The ability to complete a construction project depends a great deal on the ability to gain access to the construction work areas. Access to the proposed northern route is much better than access to the proposed southern route, which will result in fewer impacts.

TABLE 5-1**Comparison of Pipeline Routes Considered**

Environmental Factors	Unit	Northern Route	Southern Route
Total length	(mi)	6.9	4.3
New right-of-way	(mi)	6.9	4.3
Construction disturbance	(ac)	199.57	166.73
Permanent disturbance	(ac)	124.48	78.29
Wetlands	(ac)	0.0	<1.0
Water bodies:			
Perennial streams	(no)	0	1 (2 crossings)
Intermittent drainages	(no)	2	15
Significant fisheries	(no)	0	0
Ponds/lakes	(no)	0	0
Federally listed TES:			
Habitat	(mi)	0	0
Species	(no)	4	4
Cultural Resources :			
Natural Historic Landmarks	(no)	0	0
NRHP – listed sites	(no)	0	0
Unlisted/pot eligible sites	(no)	8	2
Land Use:			
Forest	(mi)	6.2	4.3
Agricultural	(mi)	0.0	0.0
Open	(mi)	0.7	0.0
Residential	(mi)	0.0	0.0
Commercial/industrial	(mi)	0.0	0.0
Other	(mi)	0.0	0.0
Residences within 50 feet of construction work area	(no)	0	0
Federal Land:			
Reclamation	(mi)	3.8	4.0
Southern Ute Indian Lands	(mi)	0.0	0.3
State Land:			
CDOW	(mi)	3.1	0.0
Recreation or other designated land use areas	(no)	0	0
Paleontological resources sites	(no)	0	0

- The hazardous geologic conditions along the steep side slopes of Basin Mountain and the difficulties associated with preparation of a construction work area in this location are major factors of concern with construction along the proposed southern route. The proposed northern route, although a very difficult route to construct as well, is a less complicated construction issue because no significant geologic hazards are apparent along this alignment. A significant potential for landslides exist along the southern route.
- The visual impact viewed from Ridges Basin of the permanent right-of-way scar would be significant for the southern routing and less so for the northern alignment.
- Impacts to cultural resources would either be avoided as the pipelines are routed, or would be mitigated for under commitments made in the FSEIS (See FSEIS page 5-17).
- Although construction on the northern route would be outside the 0.25-mile buffer zone, because of the potential for impacting golden eagle nests from other ALP Project construction a FWS permit to take inactive golden eagle nests has been applied for by Reclamation. The southern route construction would be outside the 0.25-mile zone of concern for the golden eagle nests.
- Construction and operation of the southern route right-of-way would permanently affect elk migration over Basin Mountain, as well as elk calving areas at the base of Basin Mountain. There would be no impact on elk calving areas from the northern route, and the impacts on elk migration have been mitigated for (see FSEIS pages 3-87 and 3-88).

5.1.2 Southern Route

Geotechnical assessment, geologic hazards exist along this route alignment and are a major concern in regard to potential for damage to the pipeline facility. The majority of the southern route is located within drainage basins that flow north into the proposed Ridges Basin Reservoir or into Basin Creek. Based on this exposure to the Ridges Basin Reservoir and the geologic hazard conditions, the southern route is not recommended for relocation of the pipelines.

The potential for significant environmental impacts from pipeline construction within the southern route appear greater than those from the northern route. Specific environmental concerns with the southern route include potential landslides, impact to elk calving grounds, erosion potential, the potential for water quality impacts from releases of petroleum products into Ridges Basin Reservoir, and visual impacts.

5.2 ENVIRONMENTAL COMMITMENTS

Reclamation committed to a number of mitigation measures in the FSEIS (see Chapter 5) to reduce or eliminate impacts from the construction of the ALP Project, including pipeline construction. Included in these measures were mitigation to vegetation (see page 5-11), wildlife (see page 5-12), geology and soils (see page 5-16), and cultural resources (see page 5-17). In this section, Reclamation makes additional commitments addressing impacts from pipeline construction and operation.

The FSEIS contained several Reclamation commitments to mitigate visual impacts (see FSEIS page 3-283, Alternative 4, Visual Impact 2). In addition to these commitments, Reclamation commits to the following measures to further minimize the temporary, short-term loss of vegetation cover and visual impacts from pipeline construction.

- In visually sensitive areas, restoration of the construction right-of-way shall include the revegetation and establishment of small trees and shrubs, using locally native species wherever possible, to buffer the cleared right-of-way. Such trees may require temporary protection to reduce herbivory by deer and other wildlife, and temporary maintenance (e.g., watering, insect protection) until plantings are established. Trees and large woody vegetation shall not be planted in the permanent pipeline rights-of-way (Northwest and MAPCO would be responsible).
- Noxious weeds would be identified prior to construction, and control measures during construction (e.g., pre-construction herbicide spraying, equipment cleaning) would reduce the potential spread of such noxious weeds within the right-of-way and into adjacent disturbed lands (Northwest and MAPCO would be responsible for implementation on their respective rights-of-way).
- A weed management plan would be prepared as part of the ~~Upland Erosion Control, Revegetation, and Maintenance~~ Plan to minimize the risk of weed infestations by eliminating existing weeds through scarification of the right-of-way before seeding and taking appropriate steps after seeding, including monitoring and implementation of further weed control measures. (Northwest and MAPCO would be responsible for implementation on their respective rights-of-way).
- To minimize clearing of ponderosa pines, the final route alignment, construction right-of-way configuration, and placement of extra workspace would be planned to minimize impact on ponderosa pine parkland. Clearing of mature ponderosa pines would be minimized to the extent practical. Whenever practical, trees would be left in place (Northwest and MAPCO would be responsible).

During pipeline construction on Carbon Mountain, Reclamation would avoid activities within 0.25 mile of an active eagle nest from December through June (see FSEIS page 5-13), which would avoid affecting nesting golden eagles. The FWS has identified that pipeline construction should avoid activities within 0.25 mile of an active eagle nest. None of the pipeline relocation corridor is within 0.25 mile of the nest sites on Carbon Mountain. The golden eagle, a species protected under both the MBTA and the BGEPA, is not a federally listed threatened or endangered species. Reclamation would ~~attempt to~~ avoid directly impacting the three known golden eagle nests on Carbon Mountain. ~~during either preparation of the Carbon Mountain Corridor or during pipeline installation. Reclamation has applied to the FWS for a permit to take inactive golden eagle nests on Carbon Mountain during construction of the ALP Project.~~

The potential for release of petroleum product into Ridges Basin Reservoir exists with a leak or break in the MAPCO pipeline. In order to avoid adverse effects to surface waters and groundwater in the project area, as well as potential impacts to Colorado pikeminnow, razorback sucker, and bald eagles, from petroleum products spills, Reclamation would implement or have implemented the following measures that would apply to the 10-inch-diameter MAPCO if it is converted to a petroleum products pipeline. Other than the first commitment, these would be implemented when MAPCO receives appropriate permits and clearances to convert the 10-inch-diameter pipeline from NGLs to petroleum product. The time at which this conversion would occur is presently unknown.

- Best management practices would be used by crews to minimize spills of hazardous materials during construction that could get into waterways.
- Spill avoidance technology would be implemented to minimize the risk of a spill in the petroleum product line. MAPCO would use pipe for their 10-inch-diameter pipeline in the Ridges Basin area with wall thickness equivalent to that of the pipeline crossing the Animas River (0.250 inches), and with greater steel strength (stepped up from 60X to 65X). This measure is taken to minimize the risk of a leak or spill from the pipeline. Initial operation of this pipeline would transport NGLs. If ~~When~~ conversion to petroleum product occurs, the thicker, stronger pipe would be in place as a safety assurance against spills at or near sensitive water ways.
- Appropriate technology would be implemented to minimize the volume of a spill from the petroleum product line. This technology may include motorized block valves, check valves, pump stations, detection cable with satellite link, or other current technology. This technology would be implemented before petroleum product is transported through the pipeline to minimize the volume of spill as analyzed in the Environmental Assessment and Biological Assessment of this project. This technology would include an in-line inspection system, such as a SCADA monitoring system, to allow early identification of leaks as small as 1.0 bph.
- An Emergency Response Plan for operations would be developed that details measures to contain spills and prevent further dispersal. This plan would require a response team on-site within 1 hour of leak detection. This plan would include the establishment and maintenance of on-site equipment and materials needed for hazardous spills clean-up. The plan would also describe measures and actions that would be taken to minimize, as much as possible, adverse effects of a hazardous materials spill to the environment. The plan would include provisions for portable baffles or booms to be used on land and in the reservoir to contain and impede the spread of a spill. Activities to clean a spill and repair a pipeline could disturb eagles in the area of the reservoir. Appropriate measures would be taken to minimize this disturbance. The plan would meet EPA's standards for oil and hazardous spill contingency plans.
- A petroleum product monitoring element would be incorporated into the water quality monitoring program for potential adverse bioaccumulation of trace elements in bald eagle food items in Ridges Basin Reservoir (i.e., Conservation Measure 6 of the Animas-La Plata Project FSEIS).
- Periodic surface and/or aerial inspections would be conducted along the pipeline corridor and the Ridges Basin Reservoir shoreline to provide early detection of small leaks that go undetected by small pressure loss in the pipeline.

In addition to these commitments by Reclamation which focused on reducing or eliminating the potential for release of petroleum products, the DOT regulations require Northwest to establish an operation and maintenance plan and an emergency response plan, and to conduct periodic surface and/or aerial inspections of its 26-inch-diameter natural gas transmission pipeline. Northwest would install Class III (heavier wall pipe) in portions of their right-of-way where required to do so by DOT regulation for safety reasons.

Reclamation commits to the implementation of the pertinent portions of the FERC staff's Plan and Procedures for the Northwest and MAPCO pipelines.